

ACC NR: AR6027466

(N)

SOURCE CODE: UR/0044/66/000/005/B067/B067

AUTHOR: Galimov, N. K.

TITLE: Variational methods for solving the nonlinear problems associated with the three layer oblique shells

SOURCE: Ref. zh. Matematika, Abs. 5B358

REF SOURCE: Sb. Issled. po teorii plastin i obolochek, No. 3, Kazan', Kazansk. un-t, 1965, 91-122

TOPIC TAGS: variational method, nonlinear theory, shell theory, stress analysis

ABSTRACT: Utilization of known variational principles for solving the problems associated with the three-layer oblique shells whose behavior is physically and geometrically nonlinear are examined. The functional equations, from which the Bubnov's equations may be derived, were obtained by considering the possible modes of variation of the stressed state. The derivation of the composite functionals is presented (Rayssner's variational problem). Simplified variational formulas which do not account for the transverse compressibility of the filler material are presented.
[Translation of abstract] A. Gorshkov

SUB CODE: 20

Card 1/1

UDC: 519.3:531/534

ACC NR: AR6024052

SOURCE CODE: UR/0124/66/000/004/V019/V019

AUTHOR: Galimov, N. K.; Sachenkov, A. V.

TITLE: Determination of the frequencies of free vibrations and the stability of sloping three layered spherical shells and plane plates

SOURCE: Ref. zh. Mekhanika, Abs. 4V144

REF SOURCE: Sb. Issled. po teorii plastin i obolochek. No. 3. Kazan', Kazansk. un-t, 1965, 148-156

TOPIC TAGS: vibration analysis, spheric shell structure, shell stability

ABSTRACT: An analogy is established between problems of free vibrations of a simply supported three-layered spherical shell restricted in plan by rectilinear segments with the well-known problem of oscillations of a plane membrane. The structure of the shell is considered to be asymmetric with respect to thickness. The materials of the layers are isotropic with equal Poisson ratios. The transverse compressibility of the filler is not taken into account. Theorems are formulated relative to the fundamental frequency of a simply supported, mildly sloping three-layered spherical shell and a plane three-layered plate, the validity of which is proved for a plane membrane. Axisymmetric vibrations and the stability of sloping spherical domes in plan by a circular region are also examined. [Translation of abstract] A. G. Gorshkov

SUB CODE: 20

Card 1/1

ACC NR: AR6030-01

(N)

SOURCE CODE: UR/01/94/00/003/000/V013/7013

AUTHOR: Galimov, N. K.

TITLE: Stability of three-layer cylindrical shells

SOURCE: Ref. zh. Mekhanika, Abs. 6V97

REF SOURCE: Sb. Issled. po teorii plastin i obolochek. No. 3. Kazan', Kazansk. un-ta, 1965, 157-172

TOPIC TAGS: shell stability, shell theory, cylindric shell structure

TRANSLATION: Nonlinear equilibrium equations and linear stability equations are derived for thin non-sloping three-layer cylindrical shells under the following assumptions: the bearing layers are different and are isotropic and satisfy the Kirchhoff-Lyava hypothesis; the filler is transversely isotropic and tangential displacements of its points depend linearly on the lateral coordinates; it is incompressible in a lateral direction. To derive the equations, use is made of the principle of possible displacements. The equations obtained are used to study stability loss of long cylindrical shells under the effect of external pressure, axial compression, and twisting. P. P. Chulkov.

SUB CODE: 20/3

Card 1/1

ACC NR: AP6036455

SOURCE CODE: UR/0198/66/002/011/0025/0030

AUTHOR: Galimov, N. K. (Kazan')

ORG: Kazan' Physicotechnical Institute, Academy of Sciences, SSSR (Kazanskiy Fiziko-tehnicheskiy institut AN SSSR)

TITLE: Axisymmetric flexure of circular sandwich plates with a compressible lightweight core

SOURCE: Prikladnaya mekhanika, v. 2, no. 11, 1966, 25-30

TOPIC TAGS: sandwich plate, bending stress, stress concentration, flexure, sandwich structure

ABSTRACT: The flexural behavior of sandwich plates mentioned in the title subjected to local lateral loads acting upon the upper and lower face layers is discussed. The flexural parameters of face layers and core are determined by solving the systems of homogeneous and inhomogeneous equations derived from the equilibrium equation of the plate in displacements. Formulas are derived for the flexural parameters of a plate of a radius R under the following loads: 1) a concentrated load in the center of the plate; 2) uniform continuous load over a central area of a radius smaller than R; 3) uniform continuous load over a central annular area with radii smaller than R; and 4) bending moments uniformly distributed along a central circle of a radius smaller than R. The results of a numerical calculation of flexural

Card 1/2

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R000614110011-6

ACC NR: AP6036455

parameters for a circular sandwich plate of symmetrical construction, simply supported along its edge, under uniform load over an area of radius $r = R/4$, and under a concentrated load in the center are presented in tables. Orig. art. has: 24 formulas.

SUB CODE: 20/ SUBM DATE: 16Feb66/ ORIG REF: 004/ OTH REF: 002/

Card 2/2

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R000614110011-6"

L 56006-65 EWT(1)/EWP(m)/EPF(c)/EPF(n)-2/ENG(m)/EWA(d)/EPR/ECS(k)/EWA(l)

Pd-1/Pr-4/Ps-4/Pu-4 kW

ACCESSION NR: AP5015785

UR/0143/65/000/006/0068/0073

536.242

48

47

43

AUTHOR: Isachenko, V. P. (Candidate of technical sciences); Galin, N. M. (Engineer)

TITLE: Heat transfer in a turbulent flow of liquids in an annular channel

SOURCE: IVUZ. Energetika, no. 6, 1965, 68-73

TOPIC TAGS: heat transfer, annular channel, turbulent flow

ABSTRACT: Experimental data on the heat transfer in annular channels are usually treated by the known equation:

$$Nu = c Re^m Pr^m \varphi \left(\frac{d_2}{d_1} \right)$$

Satisfactory results are also obtained in a number of cases when formulas for the calculation of heat transfer in circular channels are used for calculating heat transfer in noncircular channels but in some instances the error is considerable. One of the most probable causes of the deviation of the heat transfer coefficient appears to be the influence of the diameter ratio, which takes into account the variations of temperature and velocity fields in the flow of liquids in an annular channel. In order to clarify this problem, the average heat transfer in a smooth straight annular channel was experimentally investigated for a flow of water with

Card 1/2

L 56006-65

ACCESSION NR: AP5015785

water as a secondary heat transfer medium. The internal and external diameters of the annular channel were 19.0 and 24.9 mm, respectively, and the Reynolds and Prandtl numbers were 6×10^3 to 8.1×10^4 and 2.6 to 7.2 respectively. The results showed that the accuracy of the calculations may be improved considerably by applying the correction factor $(d_2/d_1)^{0.18}$. Orig. art. has: 1 formula and 5 figures.

[AC]

ASSOCIATION: Moskovskiy ordena Lenina energeticheskiy institut (Moscow "Order of Lenin" Power Engineering Institute)

SUBMITTED: 06Aug64

ENCL: 00

SUB CODE: TD ME

NO REF Sov: 009

OTHER: 005

ATD PRESS: 4034

CAC
Card 2/2

AUTHORS: Yermakov, A. S. and Galimov, R. Kh. SOV/94-58-2-22

TITLE: Continuous Regeneration of Transformer Oil in a 560 kVA Transformer (Nepreryvnaya regeneratsiya transformatornogo masla v transformatore 560 kVA)

PERIODICAL: Promyshlennaya Energetika, 1958, Nr 8, pp 7-8 (USSR)

ABSTRACT: This article describes a silica gel container that was mounted on the lid of a 560 kVA 6 kV transformer to maintain the neutralisation value of the oil at a satisfactory level. The transformer contains one ton of oil and the container 5 kg of silica gel. The transformer was filled with new oil in August, 1955 but by October, 1956 the neutralisation value had risen to 0.17 mg of KOH and the aqueous extract was of acid reaction. The transformer was operated with the silica gel container and by February, 1957 the neutralisation value had dropped to 0.06 mg of KOH and the aqueous extract was neutral.

There is one figure.

ASSOCIATION: 6-y Gospodshipnikovyy Zavod. (State Ball Bearing Works No. 6)

Card 1/1

L 07552-67 FSS-2/EWT(1)/EWT(m)/EWP(t)/ETI LIP(c) ID
ACC NR: AP6013410 (A) SOURCE CODE: UR/0018/65/000/012/0077/0079

AUTHOR: Galimov, S. (Lt. Col.)

29

ORG: none

B

TITLE: The use of antiaircraft guns against tanks

SOURCE: Voyenny vestnik, no. 12, 1965, 77-79

TOPIC TAGS: artillery weapon, gunnery training, military tank, antiaircraft weapon, *military personnel*

ABSTRACT: This article discusses how gun crews are trained in the author's unit. The instructions begin with an account about the heroic struggle of antiaircraft gunners against German tanks during the Second World War and an explanation of the tactics of the military operations of the tank units of the capitalistic armies. Data are given on the armament of tanks, the vulnerable places of these targets are graphically indicated, and the military possibilities of antiaircraft weapons to combat tanks and armored cars are revealed to the antiaircraft gun crews. After this the antiaircraft gunners study ground artillery terminology, the parameters of movement of the target, methods of indentifying and taking aim at them, and the errors influencing firing accuracy and the rules of introducing corrections. Thus, the gun crews become experienced artillery men as well as antiaircraft gunners. Orig. art. has: 2 figures.

SUB CODE: 15,05/ SUBM DATE: none

Conf. 3/1

LEVINTER, M.Kh.; IVANOVSKIY, G.F.; SMIRNOV, N.P.; GALIMOV, Zh.F.; GALINICH,
Ye.T.

Remolding of catalytic cracking units using a spherical catalyst.
Khim.i tekhn.topl.i masel 6 no.4:1-6 Ap '61. (MIRA 14:3)

1. Upravleniye nerudnykh iskapayemykh i Novo-Ufimskiy nefteperera-
baytvayushchiy zaved.
(Cracking process) (Catalysts)

LEVINTER, M.Kh; IVANOVSKIY, G.F.; SMIRNOV, N.P.; GALIMOV, Zh. F.;
GALINICH, Ye.T.; GIMAYEV, R.N.

Modernization of catalytic cracking units at the Novoufimka
Petroleum Refinery. Khim. i tekh.topl.i masel 6 no.7:1-6
Jl '61. (MIRA' 14:6)

1. Novo-Ufimskiy neftepererabatyvayushchiy zavod i
Upravleniye nerudnykh iskopayemykh.
(Novoufimka—Cracking process—Equipment and supplies)

LEVINTER, M.Kh.; GALIMOV, Zh.F.

Transfer of a bead catalyst in a continuous flow. Khim.i tekhn.
topl.i masel 6 no.9:20-26 S '61. (MIRA 14:10)

1. Ufimskiy neftyanoy institut.
(Catalysts)

GALIMOV, Zh.F.; VOLOSHIN, N.D.; LEVINTER, M. Ye.

Method for reducing the residual coke content in a circulating bead catalyst. Nefteper. i neftekhim. no.4:14-17 '63
(MIRA 17:7)

1. Ufimskiy neftyanoy institut.

GALLMOV, Zh.F.; MOROZOV, B.F.; LEVINTER, M.Ie.

Extent of the utilization of the inner surface of the particles
of an aluminosilicate bead catalyst. Khim. i tekhn. topl. i
masel 9 no.9:10-15 S '64. (MIRA 17:10)

1. Ufimskiy naftyanoy nauchno-issledovatel'skiy institut.

GALIMOV, Z.I.F.; LEVINTER, M.Ye.

Batch meter for the multtube pneumatic transportation of a
bead catalyst. Izv. vys. ucheb. zav.; neft' i gaz 8 no.1:63-
66 '65.
(MIRA 18:2)

1. Ufimskiy neftyanoy institut.

GOROKHOVSKIY, V.M.; LEVIN, Ya.A.; KISELEVA, I.P.; GALIMOVA, A.M.

Relation between the desensitization action and the height
of the oscillographic peak of desorption of the homologues
of 4-oxo-6-methyl-1,2,4 triazolo-(2,3-a) pyrimidine. Zhur.
nauch. i prikl. fot. i kin. 8 no.3:205-206 My-Je '63.

(MIRA 16:6)

1. Filial Vsesoyuznogo nauchno-issledovatel'skogo kinofoto-
instituta, Kazan'.

(Triazolopyrimidine)
(Photographic emulsions)

GALIMOVA, Ch.Sh.

Training of personnel in the combine for Building Petroleum Storage Units and other Petroleum Industry Facilities of the Tatar Petroleum Industry. Stroi. truboprov. 10 no.9:17-18 S '65. (MIRA 18:9)

1. Kombinat Tatneftstroy, Al'met'yevsk.

GALIMOVA, Ch.Sh.

Preparation to the seminar of young specialists. Stroi.
truboprov. 10 no. 11:29 N '65. (MIRA 18:12)

1. Kombinat Tatneftstroy, Al'met'yevsk.

GALINOVA, D. F.

"Data on the Study of the Mechanism of Intraocular Pressure Regulation (Experimental Investigation)." Cand Med Sci, Kirgiz State Medical Inst, Frunze, 1955. (KL, No 16, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

GALIMOVA, D.F.

Influence of bromine and caffeine on intraocular pressure in rabbits.
Izv. AN Kazakh. SSR. Ser. med. i fiziol. no. 1:20-31 '60.

(INTRAOCULAR PRESSURE) (BROMINE—PHYSIOLOGICAL EFFECT)
(CAFFEINE—PHYSIOLOGICAL EFFECT)

(MIRA 13:10)

GALIMOVA, D.F.

Influence of partial removal of the cerebrum in dogs on intraocular pressure. Izv. AN Kazakh. SSR. Ser. med. i fiziolog. no. 1:32-40 '60.
(MIRA 13:10)
(INTRAOCULAR PRESSURE) (CEREBRAL CORTEX)

SHAMIS, D.L., GALIMOVA, R.A.

Microflora of irrigated Sierozem soils under different tillage conditions.
Trudy Inst. mikrobiol. i virus. AN Kazakh SSR 2:3-11 '58 (MIRA 11:10)
(SOILS--BACTERIOLOGY)
(TILLAGE)
(SIEROZEM SOILS)

SHAMIS, D.L.; GALIMOVA, R.A.

Microflora of irrigated Sierozems tilled by different methods.
Report No.2. Trudy Inst. mikrobiol. i virus. AN Kazakh. SSR
3:173-180 '59. (MIRA 13:2)
(TILLAGE) (CHILIK DISTRICT--SOIL MICRO-ORGANISMS)

ACC NR: AP7004932

SOURCE CODE: UR/0315/66/000/010/0017/0018

AUTHORS: Vasilenko, T. (Section head); Galimova, S. (Senior research associate)

ORG: Vasilenko/SIF

TITLE: Development of an IPS (Information Punched-Card System) for the dairy industry

SOURCE: Nauchno-tehnicheskaya informatsiya, no. 10, 1966, 17-18

TOPIC TAGS: punched card, information center, information storage and retrieval ,
AGRICULTURE SCIENCE

ABSTRACT: A punched-card system is proposed for the dairy and meat industry of the Kirghiz Republic. All published and unpublished materials will be in the six card files. Format K-5 cards will be used. Card file No. 2, which is on cheese production, is described in detail. The numbers from 0-9, respectively, will denote: milk preparation, curd treatment, shaping-pressing, packaging, new procedures, physical properties of raw material and cheeses, chemical properties and composition, quality, other topics. Detailed instructions are to be published. Orig. art. has: 1 photograph.

SUB CODE: 06, 09/ SUBM DATE: none

Card 1/1

GALIMOVA, V.S.

3(5) PHASE I BOOK EXPLOITATION SOV/2219

RSPR. Ol'moje upravlenije geologii i khimicheskoye geologii i neftegazovoznaniot' Vostochnoy Sibiri (Geology and Oil- and Gas-bearing Possibilities of Eastern Siberia). Moscow, Gosstop-tekhnika, 1959. 466 p. 1,650 copies printed.

Additional Sponsoring Agency: Vostochno-Sibirskiy neftegeologicheskiy trakt.

Ed.: V.G. Vasilev'ev; **Executive Ed.:** Ye.D. Perzhina; **Tech. Ed.:** I.O. Fedotova.

PURPOSE: The book is intended for geologists interested in the stratigraphy, lithology, tectonics, and the oil- and gas-bearing possibilities of the Eastern Siberian Platform and Zabeykal'ye.

COVERAGE: This collection of articles contains materials on the stratigraphic classification and lithologic characteristics of sediments of the Cambrian system and of the so-called "undifferentiated beds developed along the northern slopes of the Eastern Sayan Mountains and the western littoral of Lake Baykal." Extensive information on the number of articles deal with the tectonics of the southern part of the Siberian Platform and its oil- and gas-bearing possibilities and the Mayan-type depressions. There are 40 tables, 74 figures, and 4 charts. There are 205 Soviet references.

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AVAILABLE: Library of CongressSOV/ad
8-20-59

GALIMSKIY, V.K.; MAKGIN, Ye.A.

Introducing electric heating of bitumen in highway maintenance
sections. Avt.dor. 24 no.4:12-13 Ap '61. (MIRA 14:5)
(Bitumen--Storage) (Road construction)

KOROBOV, V.I.; GALIMSKIY, V.L., agronom

Obtaining high grain yields on virgin lands of Pavlodar Province.
Zemledelie 7 no.3:10-14 Mr '59. (MIRA 12:4)

1. Nachal'nik Pavlodarskogo oblastnogo upravleniya sel'skogo khozyaystva.

(Pavlodar Province--Grain)

GALIMSKIY, V.L., agronom

Soil cultivation in regions subject to wind erosion. Zemledelie 7
no.9:73-76 S '59. (MIRA 12:11)

1. Pavlodarskoye oblastnoye upravleniye sel'skogo khozyaystva.
(Wind erosion)

TURUTA, N.U., dotsent; GALIMULLIN, A.T., inzh.; SONIN, B.A., inzh.

Experimental investigation and prospects for the use of inclined, small-diameter shafts, in opencut workings. Izv.vys. ucheb.zav.; gor.zhur. no.4:65-73 '59. (MIRA 13:5)

1. Sverdlovskiy gornyy institut imeni V.V. Vakhrusheva (for Turuta and Galimullin). 2. Nauchno-issledovatel'skiy institut asbest (for Sonin).

(Strip mining)

TURUTA, N.U., dotsent; GALIMULLIN, A.T., insh.

Technical and economic evaluation of the method of inclined slim-hole drilling in connection with blasting in open-pit mining.
Izv. vys. ucheb. zav.; gor. zhur. no.3:53-57 '60. (MIRA 14:5)

1. Sverdlovskiy gornyy institut imeni V.V.Vakhrusheva. Rekomendovana
kafedroy gornykh mashin i rudnichnogo transporta.
(Strip mining) (Boring) (Blasting)

TURUTA, N.U., kand.tekhn.nauk, dotsent; GALIMULLIN, A.T., gornyy inzh.;
TERESHCHENKO, D.V., gornyy inzh.

Adoption of inclined holes with reduced diameter at the Pervoural'sk
Mine. Gor. zhur. no.4:27-30 AP '60. (MIRA 14:6)

1. Sverdlovskiy gornyy institut (for Galimullin). 2. Pervoural'skoye
rudoupravleniye (for Tereshchenko).
(Sverdlovsk Province--Blasting)
(Boring)

GALIMULLIN, A.T., inzh.

Economic efficiency of small diameter, inclined boreholes for blasting hard to fracture rocks at the Pervoural'sk Mine. Izv. vys. ucheb. zav. gor. zhur. no.8:45-50 '60. (MIRA 13:9)

1. Sverdlovskiy gornyy institut im. V.V. Vakhrusheva. Rekomendovana kafedroy ekonomiki i organizatsii gornoj promyshlennosti.
(Ural Mountains--Mining engineering--Costs)

GALIMULLIN, A.T., inzh.

Area of practical use of inclined holes for charges reduced in diameter for blasting work in open-pit mines. Izv. vys. ucheb. zav.; gor. zhur. no. 4:85-91 '61. (MIRA 14:6)

1. Sverdlovskiy gornyy institut imeni V.V.Vakhrusheva.
Rekomendovana kafedroy gornoj ekonomiki i organizatsii proizvodstva
Sverdlovskogo gornogo instituta.
(Strip mining) (Blasting)

TURUTA, N.U., kand.tekhn.nauk; GALIMULLIN, A.T., gornyy inzhener

Using inclined holes in pits of the Pervoural'sk iron ore deposit.
Vzryv. delo no.47/4:45-52 '61. (MIRA 15:2)

1. Sverdlovskiy gornyy institut imeni V.V.Vakhrusheva.
(Pervoural'sk region--Blasting) (Boring)

TURUTA, U.N., kand. tekhn. nauk; KARPUKHIN, V.A.; GALIMULLIN, A.T.,
kand. tekhn. nauk; KRAVETS, V.G.; KHOKHLOSHKO, B.P.; STOYKO, I.V.

Investigating ore breaking with inclined borehole charges
at the strip mine of the Rozdol chemical combine. Met. i
gornorud. prom. no.3:56-57 My-Je '64. (MIRA 17:10)

TURUTA, N.U., kand. tekhn. nauk; CALIMULLIN, A.T., kand. tekhn. nauk;
PANCHENKO, D.F., inzh.; KARPINSKIY, A.V., inzh.; KOVALEVSKIY,
S.Ye., inzh.

Studying the character of the breaking of a rock massif by
detonating borehole charges. Vzryv. delo no.54/11:145-153 '64.
(MIRA 17:9)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy
institut ugol'noy, rudnoy, neftyanoy i gazovoy promyshlennosti,
Kiyev.

TURUTA, N.U., kand. tekhn. nauk; GALIMULLIN, A.T., kand. tekhn. nauk;
KHIKHLUSHKO, B.P.; KRAVETS, V.G.

Testing igdanite and "zernogramulit" at the Rozdol mining,
ore dressing, and chemical processing combine. Met. i gornorud.
prom. no. 3:61-63 My-Je '65. (MIRA 18:11)

TURUTA, N.U., kand.tekhn.nauk; GALIMULLIN, A.T., kand.tekhn.nauk,
FILATOV, L.V., inzh.

Basic regularities of rock breaking with a cone wedge.
Izv.vys.ucheb.zav.; gor.zhur. 8 no.11:74-78 '65.

(MIRA 19sl)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy
institut ugol'noy, rudnoy, neftyanoy i gazovoy promyshlennosti
UkrSSR. Rekomendovana seminarom laboratorii razrusheniya
gornykh porod. Submitted January 25, 1965.

ZONN, N.L.; GALIMULLIN, G.M.

Increasing the efficiency of pumping stations. Transp. i khran.
nefti i nefteprod. no.4:47 '64 (MIRA 17:7)

1. Chernikovskoye rayonnoye nefteprovodnoye upravleniye.

ACC NR: AT6022250

SOURCE CODE: UR/0000/66/000/000/0003/0010

AUTHOR: Galimullin, V. N.; Romanov, P. V.

ORG: none

TITLE: Calculation of principal characteristics of the amplitron with a hard-spoke approximation

SOURCE: Vsesoyuznaya nauchnaya sessiya, posvyashchennaya Dnyu radio, 22d, 1966. Sektsiya elektroniki. Doklady. Moscow, 1966, 3-10

TOPIC TAGS: amplitron, platinotron, SHF amplifier

ABSTRACT: As the G. Dombrowski method of approximate calculation of amplitron characteristics (Trans. IRE, 1959, ED-6, no. 4, 419-427) does not provide answers to many practical questions, a different method (J. Feinstein and G. Kino, Proc. IRE, 1957, no. 10, 1364-1373) is further developed. With four

Card 1/2

~~GALIMKHANOV, K.O.~~

New method for the determination of elastic and yield limits of
thin spring wire during twist. Zav. lab. 23 no.12:1485-1488 '57.
(MIRA 11:2)

1. Ufimskiy aviationsionnyy institut im. Ordzhonikidze.
(Wire--Testing)

GALIMZHANOV, K.G., inzh.; TSOY, N.D., inzh.

Mine ventilation in case of forced caving. Bezop.truda v
prom. 4 no.1:13-14 Ja '60. (MIRA 13:5)
(Mine ventilation)

GALIMZHANOV, K.G.; ISAKOV, V.A.; MAL'CHENKO, Yu. I.

Comparing alternate mining systems with ore breaking through
horizontal and upward holes in the "Sokol'nyy" deposit area.

Izv. AN Kazakh. SSR. Ser.gor.dela no.2:1-12 '60. (MIRA 13:10)
(East Kazakhstan Province--Mining engineering)

USPANOV, K.Ye.; ISAKOV, V.A.; MAL'CHENKO, Yu.I.; ALBOROV, Z.B.;
GALIMZHANOV, K.G.; KUTUZOV, D.S.

Systems of mining thin and medium thickness sections of the
Sokol'noye deposit. Trudy Inst. gor. dela AN kazakh. SSR
(MIRA 14:6)
7:38-48 '60.
(Leninogorsk region(East Kazakhstan Province)--Mining engineering)

GALIMZHANOV, K.G., inzh.; ZONDUNOV, A.N., inzh.; TSOY, N.D., inzh.

Multiple blasting with electric short-delay action detonators.
Bezop.truda v prom. 5 no.1:26-28 Ja '61. (CIA 14:2)
(Blasting)

GALIMZHANOV, K.G.; ISAKOV, V.A.; MAL'CHENKO, Yu.I.

Experimental testing of a variant of the panel caving system
with ore breaking in the haulageways of the mine named in honor
of the 40th Anniversary of the All-Union Lenin's Young
Communist League. Izv. AN Kazakh. SSR. Ser. gor. dela no.1:18-24
'61. (MIRA 15:2)

(Sokol region (Kazakhstan)--Mining engineering)

GALIMZHANOV, K.G.; BOGUSLAVSKIY, R.A.; ISAKOV, V.A.; KUTUZOV, D.S.;
MAL'CHENKO, Yu.I.; TEN, N.A.; GOLOVANOVA, A.V., otv. red.
CHASCOVIKOVA, Z.I., tekhn. red.

[Progressive practice in working medium-thick ore bodies of
the Sikolovka deposit] Perekopoi opyt razrabotki rudnykh tel
srednei moshchnosti sokol'nogo mestorozhdeniya. [By] K.G.
Galimzhanov i dr. Alma-Ata, TSentr. in-t nauchno-tekhn. in-
formatsii, 1962. 74 p. (MIRA 15:9)
(Kustanay Province--Mining engineering)

Chormonov, R. Sh.

Category: USSR / Physical Chemistry - Crystals

B-5

Abs Jour: Referat Zhur-Khimika, No 9, 1957, 29762

Author : Chormonov T. Kh., Galimzhanov R. Sh.

Inst : Kazakh Mining and Metallurgical Institute

Title : Growing of Rochelle Salt Crystals with Admixtures and Investigation
of Some of Their Physical Properties.

Orig Pub: Sb. nauch. tr. Kazakhsk. gorno-metallurg. in-t, 1956, No 14, 100-106

Abstract: Description of a method of growing crystals of Rochelle salt with
admixtures and of the study of the effects of admixtures of $KAl(SO_4)_2$, $CuSO_4$, $SrCl_2$, $RbCl$ and $LiCl$ on the external shape of the
crystals, their dielectric constant and piezoelectric modulus.

Card : 1/1

-42-

Category: USSR / Physical Chemistry - Crystals

B-5

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 29750

dyestuff. With high concentrations of the dyestuff its filtering action, and also the alteration of its aggregation state, distort the spectral distribution of PE. Analogous results were obtained with TlI. In AgBr and TlBr the PE is not sensitized by the dyestuffs. Adsorption of I₂ vapor at stained and unstained AgI and TlI results in a considerable increase of the natural as well as of the sensitized photoconductivity. The following mechanism of sensitizing is proposed: The iodine adsorbed at AgI and TlI provides acceptor surface levels. Increase in photoconductivity occurs on liberation of electrons from these levels by the energy absorbed by the molecules of the dyestuff and transmitted into the crystal (semiconductor).

Card : 2/2

-41-

GALIMZHANOVA, Lyaylyya

Noble and high goals. Sov.foto 21 no.4:18-20 Ap '61.
(MIRA 14:3)
1. Zamestitel' ministra kul'tury Kazakhskoy SSR; predsedatel'
Orgkhomieta respublikanskoy fotovystavki.
(Kazakhstan--Photography--Exhibitions)

GALIMZYANOV, F.G.; BUTAKOV, S.Ye., doktor tekhn. nauk, prof.,
retsenzent; PAL'SHIN, M.V., kand. tekhn. nauk, red.;
VASIL'YEVA, N.G., red.izd-va; DEMKINA, N.F., tekhn. red.

[Fans; atlas of designs] Ventiliatory; atlas konstruktsii.
Spravochnoe posobie. Moskva, Mashgiz, 1963. 143 p.
(Fans, Mechanical) (MIRA 16:12)

GALIMZYANOV, F.G., inzh.; BELOV, B.M., inzh.

BTsD-1.6 reversible centrifugal fan for mines. Gor. zhur.
no.7:54-57 Jl '63. (MIRA 16:8)

1. Artemovskiy mashinostroitel'nyy zavod, Sverdlovskaya obl.

GALIMZYANOV, F.G., inzh.

Study of intake boxes for fans with two-way suction. Gor. zhur.
no.9:36-39 S '63. (MIRA 16:10)

GALIMZYANOV, F.G., inzh.

Study of the aerodynamic resistance of the intake housings of fans.
Izv. vys. ucheb. zav.; gor. zhur. 6 no.3:114-120 '63.

(MIRA 16:10)

1. Sverdlovskiy gornyy institut imeni Vakhrusheva. Rekomendovana
kafedroy gornoj mehaniki.

GALIMZYANOV, F.G., inzh.

Calculation of the dimensions of ventilator intake boxes. Izv.
vys. ucheb. zav.; gor. zhur. 6 no.6:123-129 '63. (MIRA 16:8)

1. Sverdlovskiy gornyy institut imeni V.V. Vakhrusheva.
Rekomendovana kafedroy gornoj mekhaniki.
(Fans, Mechanical)

GALIMZYANOV, F.G., inzh.

Study of the intake ~~be~~ of fans with wetting agents. Izv. vys. ucheb. zav.; ger. zhur. , ne.7:181-186 '63. (MIRA 16:9)

1. Sverdlovskiy gornyy institut imeni V.V.Vakhrusheva. Rekomendovana kafedroy gornoj mekhaniki Sverdlovskogo gornogo instituta.
(Fans, Mechanical)

GALIMZYANOV, F.G., inzh.

Influence of inlet boxes on characteristics and operation of type
T-4-76 centrifugal fans. Izv. vys. ucheb. zav.; gor. zhur. 6
no.9:122-127 '63. (MIRA 17:1)

1. Sverdlovskiy gornyy institut imeni Vakhrusheva. Rekomendovana
kafedroy gornoj mekhaniki.

GALIMZYANOV, F.G., nzh.

Experimental studies on the endurance and rigidity of centrifugal
fan blades of Ts4-76 type. Gor.zhur. no.8:76 Ag '65.

(MIRA 18:10)

GALIMZYANOVA, Rashida, emulirovshchitsa; MARICHEV, Semej
NIKANOROVICH, mekhanik; CHERNOV, Ye., red., PAVLOVA, S.,
tekhn. red.

[We are using nonferrous metals sparingly] Ekonomika tsvetnye
metally. Moskva, Mosk. rabochii, 1961. 57 p.
(MIRA 15:3)

1. Podol'skiy zavod "Mikroprovod" (for Galimzyanova, Marichev).
(Nonferrous metals) (Metals, Substitutes for)

BARKOV, V., lesovod; ALIN, Yu.; GALIN, A., geolog

For the young geographers. IUn. nat. no.5:16-17 My '63.
(MIRA 16:7)
(Nature study)

GALIN, A., geolog

How they prospect for titanium. Znan.-sila 37 no.6:31-32
Je '62. (MIRA 15:9)
(Titanium ores)

GLIN A.

SUBJECT: USSR/Schooling 27-3-18/32

AUTHOR: Ran'kov, M., Director of Trade School # 14,
Slabunov, A., Deputy Director of Schooling Section,
Galin, A., Instructor of Special Technology.

TITLE: Life Demands This (Zhizn' etogo trebuyet)
Subtitle: On the Question of Training Gas- and Electric
Welders (K voprosu o peregotovke elektrogazosvarshchikov)

PERIODICAL: Professional'no - Tekhnicheskoye Obrazovaniye, Aug. 1957,
8, p 26-27 (USSR)

ABSTRACT: The authors regret that the program issued in 1956 by the
Chief Administration of Labor Reserves for training gas and
electric welders in trade and railroad schools contains a
number of mistakes. The electric and gas welding section of
the Vyksa Region Methodical Union (Gor'ki Province Administra-
tion of Labor Reserves) has come to this conclusion after hav-
ing thoroughly studied the program.
The authors emphasize the difference between welders trained
at the FZO (fabrichnozavodskoye obucheniye) industrial schools
for limited training only, and the highly qualified, licensed

Card 1/2

27-8-18/32

TITLE:

Life Demands This (Zhizn' etogo trebuyet)

Subtitle: On the Question of Training Gas- and Electric
Welders (K voprosu o podgotovke elektrogazosvarshchikov)

welders of the trade and technical schools. They point out
the necessity of training on two specialities: electric and
gas welding. In this connection the authors deal in detail
with the problem and plead for a quick solution to the various
questions.

INSTITUTION: Remeslennoye Uchilishche # 14 (Trade School # 14)

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress

Card 2/2

GALIN, A. F.

AID P - 4622

Subject : USSR/Aeronautics

Card 1/1 Pub. 135 - 11/23

Author : Galin, A. F., Eng.-Lt.Col., Candid. of tech. sci.

Title : Possibilities of increasing the cruising speed of aircraft.

Periodical : Vest. vozd. flota, 4, 56-60, Ap 1956

Abstract : Description of some methods how to increase the average speed of flight to the target by gradual gaining of altitude en route. One sketch and 5 graphs. The article is of no particular value.

Institution : None

Submitted : No date

GALIN, A.I.; GALIN, M.A.

Hygrometer for leather production. Leg.prom. 14 no.7:21-24 J1 '54.
(Leather industry) (Hygrometry) (MIRA 7:7)

GALIN, A.I., agronom

High pea yields on experimental model farms. Zemledelie 23 no.12:
18-19 D '61.. (MIRA 15:1)

1. Otdeleniye imeni Kirova sobkhoza "Rakityanskiy", Belgorodskoy
oblasti.
(Belgorod Province--Peas)

ASHURKOV, Yevstafiy Borisovich; GALIN, A.V., retsenzent;
SHCHERBAKOV, V.I., retsenzent; EYDEL', A.S., nauchn.
red.;

[Preparation for the installation of electrical equipment
on ships] Podgotovka k elektromontazhnym rabotam na su-
dakh. Leningrad, Sudostroenie, 1964. 66 p.
(MIRA 18:1)

GALIN, Boris Abramovich

GALIN, Boris Abramovich. Donbass vozrozhdaetsia. [Moskva], Profizdat, 1947. 118 p.

DLC: DS29.R8G35

So: LC, Soviet Geography, Part II, 1951/Unclassified

GALIN, Boris Abramovich

GALIN, Boris Abramovich. V Donbasse; ocherki. Moskva, Sovetskii pisatel', 1943.

250 p.

CU MH NNC NJP

DLC: DK511.D7G3

So: LC, "Soviet Geography, Part II, 1951/Unclassified

GALIN, Boris Abramovich

GALIN, Boris Abramovich. Donbass sketches. Moskva, Foreign Languages Pub. House, 1948. 281 p.

DLC: EK511.D7G313

So: LC, Soviet Geography, Part II, 1951/Unclassified

CHERNENKO, M.B.; LUKIN, Yu.B.; GUSEV, K.M.; KUDREVATYKH, L.A.; MAKARENKO,
Ya.I.; SATYUKOV, P.A., red.; STEPANOV, V.P., red.; SELYUK, S.I., red.;
SUTOTSKIY, S.B., red.; ABALKIN, N.A., red.; KOZEV, N.A., red.; AVER-
CHENKO, B.Ye., red.; SOBOLEV, L.S., red.; SIMONOV, K.M., red.; POLE-
VOY, B.N., red.; GALIN, B.A., red.

[Heroes of our times] Geroi nashikh dnei. Moskva, Izd. gazety
"Pravda," 1961. 619 p. (MIRA 14:11)
(Labor and laboring classes)

GALIN, Georgiy

Miners' friendship. Sov. profsoiuzy 3 no.5:33-38 My '55.
(Miners) (MIRA8:8)

GALIN, Drago

A method for the management of large cavities in border cases.
Tuberkuloza, Beogr. 12 no.3:332-334 '60.

1. Odjel za plucne bolesti i tuberkulozu Opce bolnice, Osijek (sef:
dr D.Galin)
(TUBERCULOSIS PULMONARY surg)

GALIN, G.M., red.

Salavat. Ufa, Bashkirskoe knizhnoe izd-vo, 1965. 55 p.
(MIRA 19:1)

GALIN, G. Ya.
USSR/Mechanics - Elasticity and Plasticity

FD-2488

Card 1/1 Pub 85-15/19

Author : Galin, G. Ya.

Title : On conditions on the surfaces of strong discontinuities for elastic
and plastic bodies

Periodical : Prikl. Mat. i Mekh., 19, 368-370, May-June 1955

Abstract : In posing problems in the theory of elasticity and plasticity surfaces are introduced on which the characteristics of motion involve discontinuities. The author states that there is a dependence among the characteristics along various sides of the surface of a discontinuity. He formulates conditions, in the region of a jump, which evolve from the laws of thermodynamics for media whose deformation outside the surface of a discontinuity can be regarded as either an equivalent reversible or an equivalent irreversible process.

Institution: --

Submitted : March 9, 1955

GALIN, G. Y.

"On Shock Waves and Propagation of Disturbances in Media with an Arbitrary Equation of State."

Paper presented at the 4th all-Union Conf. on Acoustics, Moscow, 26 May - 2 Jun 58.

2o-119-6-13/56

AUTHOR: Galin, G. Ya.

TITLE: Shock Waves in Media With an Arbitrary Equation of State
(Ob udarnykh volnakh v sredakh s proizvol'nym uravneniyem sostoyaniya)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 6,
pp. 1106 - 1109 (USSR)

ABSTRACT: The author investigates rectilinear discontinuities in media the internal energy of which is completely determined by the value of the specific volume and of the entropy. If the function $E = E(V, S)$ is known, then the equation $dE = TdS - pdV$ yields two more relations for the following 5 quantities: specific volume V, pressure p, absolute temperature T, internal energy E and entropy S. Three finite equations between V, p, T, E, S determine all mechanical and thermal properties of the body. Various particulars are shortly mentioned. The present paper gives additional data on the shock adiabatics, which together with the known facts and methods permit to construct the Hugoniot (Gyugonio)adiabatics. This makes possible the investigation of the properties of the shock transition for media with an arbitrary equation of state, the derivative $(\partial^2 p / \partial V^2)_S$ changing

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Shock Waves in Media With an Arbitrary Equation of State 20-119-6-13/56

its sign along the Hugoniot (Gyugonio) adiabatic. The author poses the following problem: Is it possible for a Hugoniot (Gyugonio) adiabatic to have more than one point in common with a Poisson adiabatic? This is answered by the following theorem: If the Hugoniot (Gyugonio) adiabatic with the center (v_1, p_1) has one point in common with the Poisson adiabatic $S = S_2(v_2, p_2)$ and, if furthermore, points on the Poisson adiabatic line exist satisfying the equation

$$\frac{p_1 + p_i}{2} (v_1 - v_i) = \frac{p_1 + p_2}{2} (v_1 - v_2) + \int_{v_i}^{v_2} p \Big|_{S=S_2} dv,$$

then the shock adiabatic passes through the points (v_i, p_i) . No other common points exist. The point (v_1, p_1) will be situated on the shock adiabatics with the centers (v_2, p_2) and (v_i, p_i) .

Card 2/3 On the strength of this theorem it is possible to solve the

Shock Waves in Media With an Arbitrary Equation of State 20-119-6-13/56

problem of the possibility of compression- and expansion shock waves. Subsequently the author discusses some properties of shock adiabatics; the here discussed considerations also hold for solids, if the elementary work of internal forces can be represented in the form of a single-term expression Xdy . There are 4 figures and 8 references, 8 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvenny universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

PRESENTED: December 7, 1957, by L. I. Sedov, Member, Academy of Sciences, USSR

SUBMITTED: December 6, 1957

Card 3/3

AUTHOR: Galin, G.Ya. (Moscow)

20-120-4-12/67

TITLE: On the Propagation of Perturbations in Media With a Non-Linear Dependence of the Stresses on Deformations and Temperature
(O rasprostranenii vozmushcheniy v sredakh s nelineynoy zavisimost'yu napryazheniy ot deformatsiy i temperatury)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 120, Nr 4, pp 730-733 (USSR)

ABSTRACT: Let the internal energy E of the medium be a given function of the deformation e and of the entropy S : $E = E(e, S)$. By partial differentiation $dE = TdS + \frac{1}{\varrho_0} \sigma' de$ one obtains the stress σ' and the absolute temperature T : $\sigma' = \sigma'(e, S)$, $T = T(e, S)$. Under the assumption of an arbitrary dependence of the stresses on the deformations and temperature the propagation of perturbations in the half space $x > 0$ is considered which arise by the effect of a constant stress acting on $x = 0$. The equations of the adiabatic motions with plane waves

$$\frac{\partial \sigma'}{\partial x} = \varrho \frac{\partial^2 x}{\partial t^2}, \quad \frac{s_0}{\varrho} = \frac{\partial x}{\partial x_0} = 1 + e, \quad \frac{\partial S}{\partial t} = 0$$

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On the Propagation of Perturbations in Media With 20-120-4-12/67
a Non-Linear Dependence of the Stresses on Deformations and Temperature

and the initial- and boundary conditions :

$$t = 0 : x = x_0, \frac{\partial x}{\partial t} = 0, S = S_0, \sigma' = \sigma'(0, S_0) = \sigma'_0, T = T(0, S_0) = T_0$$

$$x_0 = 0 : \sigma' = A = \text{const} \neq \sigma'_0, A < 0$$

are replaced by equations in nondimensional variables

$$\lambda = \frac{x_0}{t \sqrt{\sigma'_k / \sigma_0}}, \quad \frac{x}{t \sqrt{\sigma'_k / \sigma_0}} = X(\lambda), \quad \frac{\sigma'}{\sigma_k} = F(e, \eta), \quad \frac{S}{S_k} = \eta(\lambda), \quad \text{etc.}$$

according to the dimensional method of Sedov [Ref 3] ; one obtains

$$(1) \left[\lambda^2 - \left(\frac{\partial P}{\partial e} \right) \eta \right] X''(\lambda) = 0, \quad X'(\lambda) = 1 + e, \quad \eta'(\lambda) = 0$$

and the conditions for $\lambda = \infty$ and $\lambda = 0$.

(1) has two solutions. One of them corresponds to a motion with constant velocity under constant values of the deformation, entropy, stress and temperature. The second solution is an instationary compression- and dilatation wave, where

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On the Propagation of Perturbations in Media With a
Non-Linear Dependence of the Stresses on Deformations and Temperature 20-120-4-12/67

several possibilities exist. The author explicitly investigates
the cases where along the Poisson adiabatic it is
 $(\partial^2 P / \partial e^2)_{\gamma} < 0$, where in the domain $e < 0$

$\left(\frac{\partial^2 P}{\partial e^2} \right)$ vanishes once and where it vanishes twice.

There are 3 figures, and 8 references, 7 of which are Soviet,
and 1 English.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova
(Moscow State University imeni M.V. Lomonosov)

PRESENTED: January 11, 1958, by L.I. Sedov, Academician

SUBMITTED: January 10, 1958

1. Turbulent flow--Mathematical analysis
2. Stress analysis
3. Temperature--Physical effects
4. Materials--Deformation
5. Thermal stresses--Physical effects

Card 3/3

GALIN, G. Ya., Cand Phys-Math Sci -- "On impact waves and diffusion of disturbances in media with arbitrary ~~levelling~~^{deformation} of the condition." Mos, 1959. 6 pp (Mos State U im V. V. Lomonosov), Mechano-Math Faculty), 150 copies. Bibliography: pp 5-6 (12 titles) (KL, 27-59, 118)

- 4 -

10(2), 10(5)

SOV/20-127-1-14/65

AUTHOR: Galin, G. Ya.

TITLE: On the Theory of Shock Waves (K teorii udarnykh voln)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 1, pp 55-58(USSR)

ABSTRACT: If viscosity and thermal conductivity are taken into account in a theoretical investigation of the structure and width of a shock front, it is possible to represent the corresponding equations of motion according to a single integration in the following form (1):

$$\frac{v}{V} = j = \text{const}; \quad \mu j \frac{dv}{dx} = p + Vj^2 - a; \quad \lambda \frac{dT}{dx} = jF. \quad \text{Here}$$

$F = E - V^2 j^2 / 2 + aV - b$; v is the velocity of the particles in that system of coordinates, in which the shock wave itself rests (the x -axis of the system has the same direction as the flow); $\mu = (4/3)\eta + f > 0$; η, f are the first and second coefficients of viscosity; λ - the coefficient of thermal conductivity; j - the density of the gas flow (flow of the liquid); E - internal energy. The constants

$$a = p_0 + j^2 v_0 = p_1 + j^2 V_1 \quad \text{and} \quad b = E_0 + p_0 v_0 + j^2 v_0^2 / 2 =$$

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On the Theory of Shock Waves

SOY/2 -127-1-14/65

$= E_1 + p_1 V_1 + j^2 V_1 / 2$ were determined from the following conditions: On the boundaries of the flow the gradients of the pressure p , of the specific volume V , of the absolute temperature T , and of the velocity V vanish. The values of the characteristics of the motion itself agree with their values before and behind the shock wave. The shock waves are considered to be the boundary of such continuous flows. The present paper deals with the problem of the existence of the steady solution of (1) for media with an arbitrary equation of state and with the conclusions resulting from the investigation of the shock-like transitions as the limit of these continuous transitions. From (1) one obtains:

$$\frac{dp}{dV} = - \frac{\kappa j^2 F(V, p) + TS_V(a - j^2 V - p)}{\gamma TS_p(a - j^2 V - p)}, \text{ where } \gamma = c_p/c_v \text{ is}$$

the ratio of specific heats and $\kappa = \mu c_p/\lambda$ is Prandtl's number. The singular points of the equation last written down in the p - V -diagram are the intersecting points of the shock-adiabatic with the center (V_0, p_0) and the beam a passing

Card 2/4

through the points (V_0, p_0) , (V_1, p_1) . The author then deduces

On the Theory of Shock Waves

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the following theorems (the indices 0 and 1 refer to states before and behind the shock wave): Theorem 1: if $s_0 > s_1$, the initially written down system of equations has no steady solution which would correspond to the shock-like transition $(v_0, p_0) \rightarrow (v_1, p_1)$. Theorem 2: If the shock adiabatic with the center (v_0, p_0) between the points $(v_0, p_0), (v_1, p_1)$ in the motion of (v_0, p_0) to (v_1, p_1) is located to the left of the beam α or agrees with it, there exists a unique steady solution of the initially written down system of equations, which corresponds to the shock-like transition $(v_0, p_0) \rightarrow (v_1, p_1)$.

In the former case $s_1 > s_0$ always holds, and in the second $s_1 = s_0$. Theorem 3: If between the points $(v_0, p_0), (v_1, p_1)$ the shock adiabatic with the center (v_0, p_0) bends round the beam α , the initially written down system has no steady solution which passes through the points (v_0, p_0) . Theorem 4: Only such shock-like transitions are possible in which the shock adiabatic with the center (v_0, p_0) between the points

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On the Theory of Shock Waves

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(v_0, p_0) ; (v_1, p_1) agrees with the beam or is located to the left of it in the motion from point (v_0, p_0) to point (v_1, p_1) . The nature of the dissipative forces is more complicated in solids than in liquids or gases. There are 2 figures and 5 references, 4 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

PRESENTED: March 25, 1959, by L. I. Sedov, Academician

SUBMITTED: March 23, 1959

Card 4/4

GALIN, I. YA.

Galin, I. Ya. "Condition of raw material base of the ceramic industry of the Ministry of the Building Construction Industry USSR and the outlook for its expansion," in symposium: *Syr'yevyye resursy tonkokeram. prom-sti SSSR i puti ikh ispol'zovaniya*, Moscow-Leningrad, 1949, p. 208-14

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

G.I.I., L...

Resheniya kraynykh zadach teorii uprugosti metodom tochechek i interpolatsii.
Prikl. matem. i mekh., 3:4 (1934), 163-172.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A.G.,
Barkaushevich, A.I.,
Rashevskiy, F.I.
Moscow-Leningrad, 1948

SALIN, L.A.

Galin, L. A. Pressure of a punch with friction and cohesion
[Galin, L. A. *Appl. Math. Mech. [Akad. Nauk SSSR, Prikl. Mat. Mech.]* 9, 413-424 (1945). (Russian; English summary). [MF 15349]]

A rigid punch with plane base $ABCD$ is pressed against an elastic half plane $y < 0$ by a force P . Friction of magnitude ρ acts along the segments AB and CD of the punch, but the tangential stress is insufficient to produce sliding along the segment BC , so that the punch adheres to the medium along BC . A solution of this elastic problem is given with the aid of two functions of a complex variable, analytic in the region $y < 0$, which are determined from integrals of Cauchy's type. The following boundary conditions are used for the determination of these functions. The displacements are $u(x, 0) = \text{constant}$ on BC and $v(x, 0) = \text{constant}$ along AB , BC and CD . The tangential stress $t(x)$ and the normal stress $p(x)$ on the boundary satisfy the conditions $t(x) - \rho p(x) = 0$ on AB , $t(x) + \rho p(x) = 0$ on CD , $t = p = 0$ elsewhere. It is shown that the ratio of the length of the range of adhesion to the total length of the punch depends on ρ and the ratio of Poisson. [Cf. the following review.]

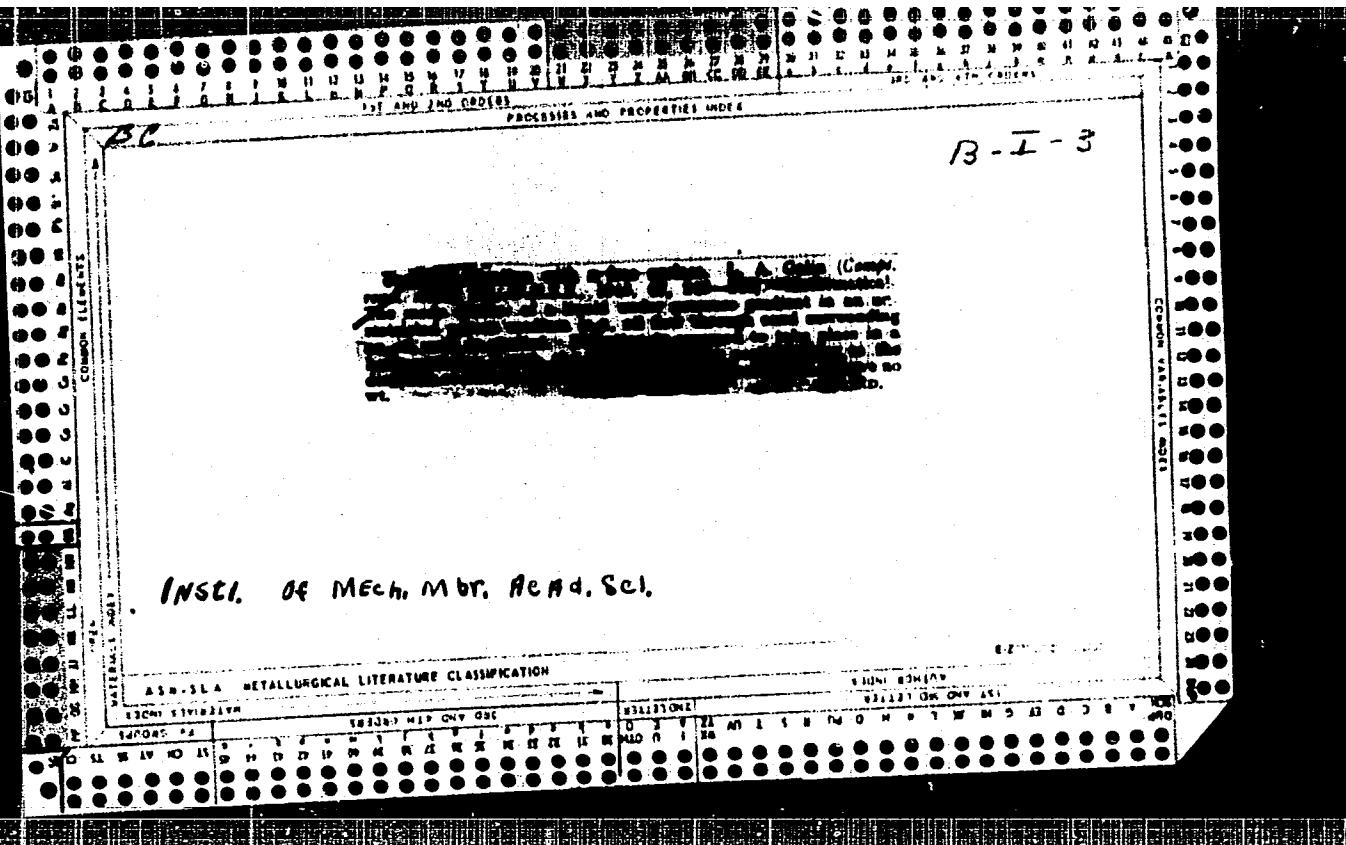
I. S. Sokolnikoff (Los Angeles, Calif.).

Source: Mathematical Reviews,

Vol. 8, No. 2

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R000614110011-6



APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R000614110011-6"

GALIN, L. A.

Ploskaia uprugo-plasticheskaiia zadacha; plasticheskie oblasti u krugovykh
otverstii v plastinkakh i balkakh. (Prikladnaia matematika i mekhanika,
1946, v. 10, no. 3, p. 367-386, diagrs.)

Summary in English.

Title tr.: Plane elastic-plastic problem. Plastic regions around circular
holes in plates and beams.

QA801.P7 1946

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of
Congress, 1955.

Mathematical Reviews
Vol. 14 No. 11
December, 1953
Mechanics.

Leonov, M. Ya. The general problem of the pressure of a circular punch on an elastic half-space. Akad. Nauk SSSR, Prikl. Mat. Meh. 17, 87-98 (1953). (Russian)

The theory of the pressure of a rigid circular cylinder (termed punch) on the elastic half-space was given in a most general form by L. A. Galin [same journal 10, 425-448 (1946); these Rev. 8, 241]. The author of this paper presents a summary of the above work and gives a more detailed development for particular cases. The method involves a wide application of harmonic stress functions, potential functions, and Green functions. The problem can be stated briefly as follows: given the displacements under a rigid circular punch, find the pressure under the punch and the displacements of the plane surface of the half-space which is outside the punch. The author discusses two cases: when the axis of the cylindrical punch is normal to the plane surface of the half-space, and when it is inclined.

T. Leser (Lexington, Ky.).

Galin, L. A.

Galin, L. A. A contact problem with axial symmetry in
the theory of elasticity. C. R. (Doklady) Acad. Sci.
URSS (N.S.) 53, 781-784 (1946).

Source: Mathematical Reviews,

Vol. 8 No. 5

~~Galin, L.A.~~

Galin, L. A. Plane elasto-plastic problem. Plastic zones in the vicinity of circular apertures. Appl. Math. Mech. [Akad. Nauk SSSR. Prikl. Mat. Mech.] 10, 367-386 (1946). (Russian; English summary).

The paper is concerned with the stresses in an infinite elastic-plastic slab with a circular hole when the state of stress at infinity and the (uniform) pressure acting on the boundary of the hole are given. The line separating the plastic from the elastic region is determined approximately by function-theoretical methods under the tacit assumption that this line includes the hole. [This assumption is not necessarily justified.] W. Prager (Providence, R. I.).

Source: Mathematical Reviews.

Vol. 8, No. 1

Galin, L. A.

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Galin, L. A. Indentation of a punch of elliptic shape in
plane in an elastic semi-space. Appl. Math. Mech.
[Akad. Nauk SSSR. Prikl. Mat. Mech.] 11, 281-284
(1947). (Russian. English summary)

Source: Mathematical Reviews, 1948, Vol 9, No. 2

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Galin, L. A.

Galin, L. A. Notes on the theory of a wing of finite span in a supersonic flow. Appl. Math. Mech. [Akad. Nauk SSSR. Prikl. Mat. Mech.] 11, 383-386 (1947). (Russian, English summary)

The author considers a supersonic flow around an airfoil of finite span. If we assume that the motion takes place in the x -direction, then the potential function ϕ satisfies the simplified compressibility equation $\phi_{xx} + \phi_{yy} - (M^2 - 1)\phi_{zz} = 0$ and the boundary conditions $\partial\phi/\partial z = 0$ for $z=0$ in front of the wing (inside the Mach cone). For the value of z belonging to the intersection S of the wing (and lying inside the Mach cone) with the (x, y) -plane, we have $\partial\phi/\partial z = f(C, y)$, $f(x, y) = \partial F(x, y)/\partial x$, where $z = \pm F(x, y)$ is the equation of the wing. Using the results on representation of solutions of the wave equation, the author obtains an approximate solution in the form

$$\varphi(x, y, z) = \pi^{-1} \int_0^\infty \int_{-\infty}^\infty f(t, \eta) \frac{1}{(x/(t^2 - 1))(-\xi)^2} \frac{-(y - \eta)^2 - \rho^2}{14(\eta)} d\eta dt$$

In a similar manner the problem of the vibrating wing is treated. In the latter case the potential is assumed in the form $\phi(x, y, z) + \Re \psi(x, y, z) e^{i\phi - i\omega t}$, where ϕ satisfies the equation $\phi_{xx} + \phi_{yy} - \phi_{zz} - \lambda^2 \rho = 0$, $\lambda = \text{constant}$. Using Hadamard's formulas for the potential of a simple layer for the above equation, the author obtains an approximate formula satisfying the derived boundary conditions.

S. Bergman (Cambridge, Mass.)

Source: Mathematical Reviews, 1948, Vol. 9, No. 5

GALIN, L. A.

Krylo priamougol'noi formy v plane v sverkhzvukovom potoke. (Frikcional'naya matematika i mehanika, 1947, v. 11, no. 4, p. 465-474, diagrs., bibliography)

Summary in English.

Title tr.: A wing of rectangular plane in a supersonic flow.

Reviewed by P.A. Lagerstrom in Mathematical Reviews, 1948, v. 9, no. 5, p. 254.
QA801.P7 1947

So: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress,
1955

GALIN, L. A.

Udar po tverdomu telu, nakhodiashchemusia na poverkhnosti szhimaemoi zhidkosti.
(Prikladnaia matematika i mehanika, 1947, v. 11, no. 5, p. 547-50, bibliography)

Title tr.: Impact upon a solid body placed on the surface of a compressible fluid.

Reviewed by H. P. Thielman in Mathematical Reviews, 1948, v. 9, no. 5, p. 254.

QA801.P7 1947

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress,
1955

GALIN, L.A.

Galin, L. A. The pressure of a punch with a plane base, in the form of an infinite wedge, on an elastic half space. Doklady Akad. Nauk SSSR (N.S.) 53, 203-208 (1947). (Russian)

The distribution of stresses in a semi-infinite isotropic elastic half-space $\mathbf{v} \geq 0$ produced by the pressure of a rigid punch bounded by a contour C reduces to the search for a harmonic function $\varphi(x, y, z)$, regular at infinity, and satisfying the conditions $\varphi = c$ in the region interior to C and $\partial\varphi/\partial z = 0$ in the region exterior to C . The constant c denotes the displacement of the punch in the direction of the z -axis. The author solves this boundary value problem for a wedge-shaped region formed by a pair of straight lines intersecting at an angle α . I. S. Sokolnikoff (Los Angeles, Calif.).

Source: Mathematical Reviews,

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